

Sony AV-8650 1/2" open reel editing deck

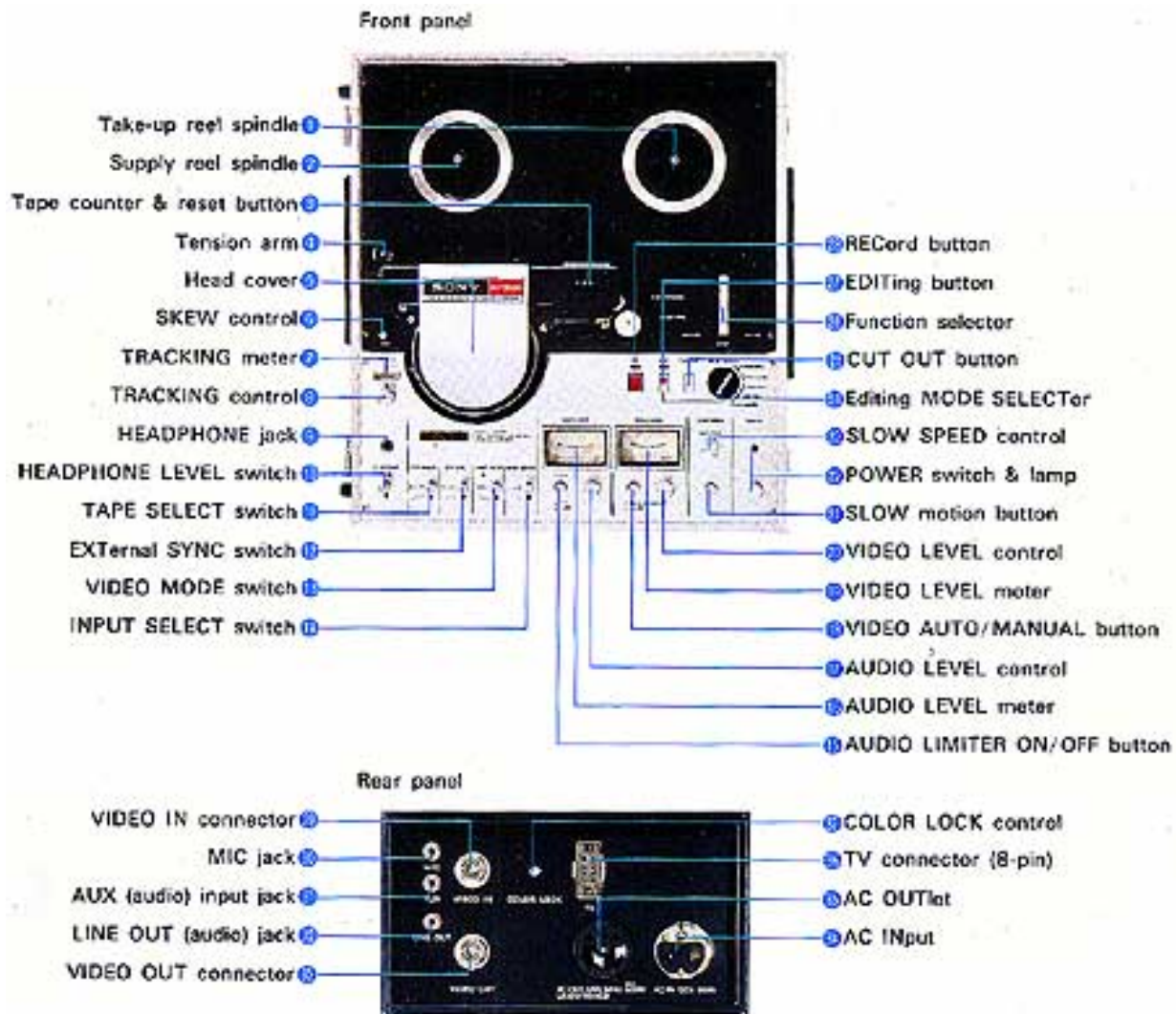
SONY 8650

From an Operating Instructions manual for the AV-8650.

Features

Specifications

Panel facilities



The Sony Videocorder model AV-8650 is a highly-advanced color video tape recorder designed especially for use with Sony video cameras and monitors, and will record video signals that conform to EIA monochrome or NTSC color standards. The AV-8650 provides color/monochrome video and audio recording and playback. Full editing capability simplifies professional tape production.

FEATURES

Tapes are fully interchangeable so that a tape recorded on any Sony AV-Series Videocorder can be played back on the AV-8650. However high density tapes recorded on the AV-8650 are only interchangeable on other high density tape machines such as other AV-8650 Videocorders.

Both regular tape and high density tape can be used. When using high density tape, particularly in editing, the high quality picture can be obtained. The TAPE SELECT switch adapts the Videocorder to the type of tape.

Video and audio signals can be inserted into or assembled onto a prerecorded tape. The rotary erase head and vertical interval switcher assures smooth insertion and assembly

A converted sub-carrier direct recording system and dropout compensator are employed.

External sync may be checked during playback without disconnecting the signal source.

The capstan servo system monitors and controls the tape speed, assuring precise editing and a stable picture with minimum jitter.

Video recording level can be controlled automatically or manually by the setting of the VIDEO AUTO/MANUAL button. Audio LIMITER for recording is selected with the AUDIO LIMITER ON/OFF button.

A still playback picture can be obtained by setting the Function selector to PAUSE/STILL. Slow motion tape speed is adjustable by means of the SLOW SPEED control.

Tracking and skew conditions are manually controlled in the playback mode. A level meter indicates tracking condition.

SPECIFICATIONS

General:

Power requirement AC 120V \pm 10%, 60 Hz \pm 0.5%

Power consumption 95W

Ambient temperature 32°F-104°F

Video recording standards Monochrome, EIA standard

Color, NTSC standard

Video recording system Rotary 2-head helical-scan system, FM recording

Tape pattern EIA Japan type-1

Tape speed 7 1/2 ips

Recording time more than 60 min. with Sony V-32 (regular) or V-72 (high density)

Rewind and fast forward time within 6 min. with Sony V-32 or V-72

Dimensions 17 1/2" (w) x 10 3/4" (h) x 18 5/16" (d)

Weight 55lb

Video signal

Input Composite, sync negative 0.5-2.0 Vp-p, 75 ohms, unbalanced

Output Composite, sync negative 1.0 Vp-p, 75 ohms, unbalanced

Resolution Monochrome

regular tape, more than 300 lines

high density tape, more than 350 lines

Color

regular tape, more than 240 lines

high density tape, more than 250 lines

Signal-to-noise ratio regular tape, better than 40 dB

high density tape, better than 43 dB

Audio signal

Input MIC : -60 dB, LOW impedance, unbalanced

AUX: 0 dB, HIGH impedance, unbalanced

TV: -20 dB, HIGH impedance, unbalanced

Output LINE: 0 dB, less than 2 k ohms, unbalanced

TV: 0 dB, less than 2k ohms, unbalanced

Headphone: 8 ohms

Frequency response regular tape, 80--10,000

Hz high density tape, 80-12,000 Hz

Signal-to-noise ratio better than 40 dB

Special functions

Slow Playback speed is continuously variable from 1/16 to 1/5 of normal speed

Tracking Adjustable

Skew Adjustable

Editing Assemble : video and audio (simultaneously)

Insert : video and audio, video only, audio only (independently selectable)

Accessories supplied

Reel, RH-7V

Head cleaner set

AC power cord

Lubricating oil

Sony video tape V-30

Splicing tape

Polishing cloth

Design and specifications subject to change without notice.

Front panel facilities

3. Tape counter & reset button

Tape counter indicates the amount of tape used. The figures can be reset to [000] by pushing the reset button.

6. SKEW control

Controls the tape tension. Adjust this control only if the upper part of the picture is distorted in the playback mode. When the RECOrd button is depressed, the SKEW control knob automatically returns to its center position.

7. TRACKING meter

Indicates tracking condition. Adjust the TRACKING control to obtain maximum deflection on the meter.

8. TRACKING control

Regulates video-head tracking. If the playback picture is distorted due to deformation of the tape, turn the knob to achieve optimum picture stability while watching the TRACKING meter. This knob does not function in the record mode.

9. HEADPHONE jack

Use headphones with an impedance of 8 ohms.

10. HEADPHONE LEVEL switch

Selects one of two sound levels for the headphones.

11. TAPE SELECT switch

The switch is set to REGULAR or to HIGH DENSITY, according to the type of the tape used.

12. EXTERNAL SYNC switch

In the NORMAL position, the playback video signal is locked to the external signal(sync) applied to the VIDEO IN connector, and in the DEFEAT position to the internal sync signal.

13. VIDEO MODE switch

Set the switch to COLOR for a color recording or to B/W for a monochrome recording. This switch is used in both the record and the playback mode.

14. INPUT SELECT switch

Selects video input signals applied to the VIDEO IN connector (LINE position) or TV connector (TV position).

15. AUDIO LIMITER ON/OFF button

Selects LIMITER recording or manual recording system. The action of the LIMITER recording system is the same as manual recording with normal signal levels. However, when a high audio input signal is introduced, this system limits the peak level and minimizes the occurrence of unnecessary distortion.

16. AUDIO LEVEL meter

Indicates the audio recording level during recording or playback audio signal level in the playback mode.

17. AUDIO LEVEL control

To adjust the audio recording level manually, turn the control while watching the AUDIO LEVEL meter. This control is. for record only, and does not adjust the playback signal.

18. VIDEO AUTO/ MANUAL button

Selects automatic or manual control of video recording level.

19. VIDEO LEVEL meter

Indicates the video recording level during recording and the playback video signal level during playback.

20. VIDEO LEVEL control

To adjust the video recording level manually, turn this knob while watching the VIDEO LEVEL meter. This knob has no control over the playback signal.

21. 23. SLOW motion button & SLOW SPEED control

To slow the playback picture, push the SLOW motion button and turn the SLOW SPEED control to set the desired speed.

24. Editing MODE SELECTor When editing, set the position of this selector for assembly or according to the desired insert mode.

ASSEMBLE... for assembly of video and audio signals onto the end of a prerecorded tape

INSERT VIDEO/AUDIO... for simultaneous insertion of video and audio signals in the midst of a prerecorded tape

INSERT VIDEO ONLY... for insertion of video signal only

INSERT AUDIO ONLY... for insertion of audio signal only

25. CUT OUT button

At the end of an insertion, press this button.

26. Function selector

FAST FORWARD... advances the tape quickly.

PAUSE/STILL... stops the tape so that a still picture can be obtained in the playback and record mode.

FORWARD... moves the tape at normal speed for recording, playing back and editing.

STOP... stops tape motion.

REWIND... rewinds the tape.

27. EDITing button

Permits assembly or insertion of new material into a prerecorded tape.

28. RECOrd button

To place the Videocorder in the E-to-E, record or editing mode, press the RECOrd button.

Rear panel facilities

29. VIDEO IN connector

Accepts a video camera, video monitor, video tape recorder or other external video source.

30. MIC jack

Use this jack to connect a low impedance microphone.

31. AUX(audio) input jack

Use this jack to accept an audio signal source such as a phonograph, tuner, tape recorder, or other microphone/amplifier system, for recording purposes.

32. LINE OUT(audio) jack

Supplies the playback audio signal to other equipments.

33. VIDEO OUT connector

Feeds video to a video monitor or video tape recorder with 75-ohm impedance.

34. AC INput

Connect the power cord to any convenient ac outlet, 120V, 60 Hz.

35. AC OUTlet(unswitched)

Supplies ac power(up to 500W) to other equipment.

36. TV connector(8-pin)

Accepts any Sony CVM-Series video receiver monitor. All video and audio interconnections to the receiver monitor are made at this connector.

37. COLOR LOCK control

A behind the panel screwdriver control to provide playback color lock adjustment.